Nuclear Division News

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 7, No. 13/June 24, 1976

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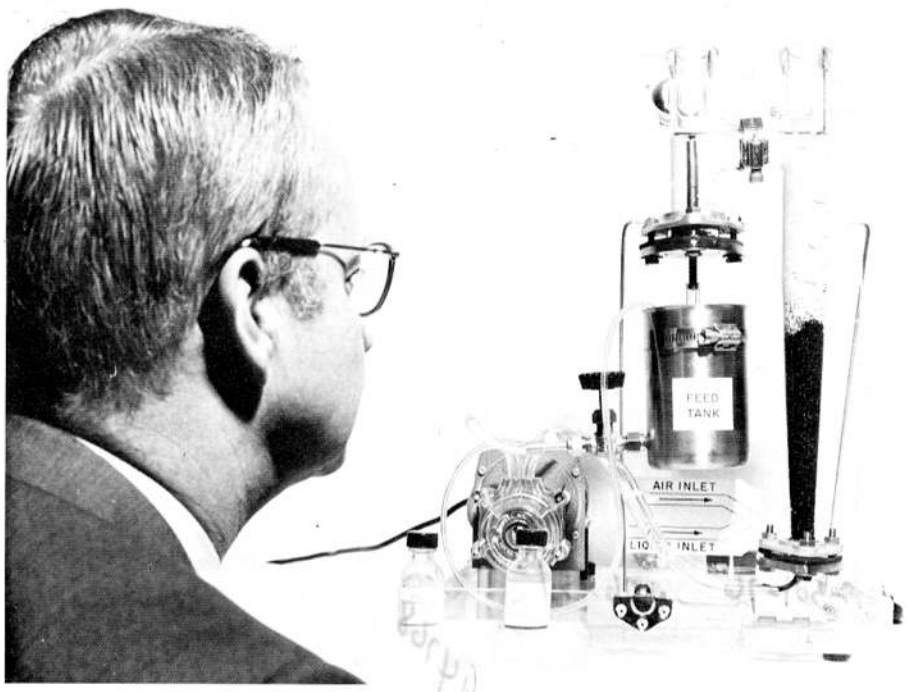

BIOREACTOR MODEL — Chemical engineer Charles D. Scott, ORNL, demonstrates a table-top model of an ORNL process for cleaning up the liquid wastes produced when coal is converted to other fuels. The device is called a "fluidized-bed bioreactor;" the "bugs" are bacteria adhering to finely-ground coal particles in the tapered column on the right, through which the waste stream passes. The process reduces levels of phenols, cancer-causing agents found in coal tar, from several hundred parts per million to environmentally acceptable levels of less than 25 parts per billion — and does this in a few minutes.

In 'bioreactor' process

Micro-organisms eat wastes produced in coal conversion

How do you keep toxic liquid wastes produced at plants that convert coal into other fuels from contaminating lakes or streams?

One way is to "bug" them.

Researchers at Oak Ridge National Laboratory have developed a process which uses microscopic organisms to gobble up phenols, substances found in coal tars and known to have cancercausing properties. Phenols are found in the liquid wastes of coal conversion facilities, including gasification and liquefaction plants as well as coke-making operations of steel mills.

Nature protecting nature

The pollution-eating "bugs" are part of a process known technically as a "fluidized-bed bioreactor." Basically, the process consists of a vertical, tapered column containing pulverized coal suspended in water. Harmless bacteria are poured into the system and attach themselves to the coal particles.

The plant's wastes, together with air, are pumped through the column where the organisms gorge themselves on the phenols, which are broken down into harmless substances such as carbon dioxide. Meanwhile, the phenol-hungry organisms thrive, creating more organisms, or "biomass," to remove more phenols. In effect, nature is being used to protect nature.

Peridically, some of the biomass has be be removed from the column to prevent excessive buildup. The removed material can be safely incinerated or put into a landfill.

The new process is expected to be at least 10 times more efficient than conventional pollution control systems in removing phenols, according to Charles D. Scott, chief of ORNL's experimental engineering section and head of the team working on the process.

"Laboratory studies have shown that phenol levels can be reduced from greater than 100 parts per million to less than 25 parts per billion, a level that is environmentally acceptable," Scott said.

Pilot studies planned

Research on the pollution-eating process is funded by ERDA's Division of Biomedical and Environmental Research. The work is part of ERDA's ongoing efforts to assure that as new energy technologies are developed and demonstrated they will be designed to have minimum impact on the environment.

The process is presently in the laboratory stage. Pilot studies are planned at Oak Ridge and other facilities using actual wastes from a plant, according to Scott.

He estimates that a unit of five or six "bioreactors" three to four feet in diameter would probably be able to treat phenol wastes from a conversion facility that uses up to 100,000 tons of coal a day. This plant size, envisioned for very large future coal conversion facilities, is much larger than those now planned.

United Way '76

Committee chosen to lead bicentennial year drive

"200 Years of Giving" will be the general theme for the Nuclear Division's 1976 United Way Campaign scheduled for October. "Although the United Way did not exist as an organization when the U.S. acquired its independence, the country itself was founded on the premise of people helping people," explains W. Ron Ragland, chairman for this year's drive. "And that's what the United Way is all about."

Ragland is director of the Finance and Materials Division at Oak Ridge National Laboratory. He joined the Nuclear Division staff at the Y-12 Plant in 1960.

In 1973, Ragland was United Way chairman for the Y-12 Plant. He was impressed by the enthusiasm and dedication shown by employees in the Nuclear Division during the drive. "They were genuinely concerned about individuals served by United Way agencies, and were willing to give time and money to help these agencies do their jobs better," Ragland said.

Ragland lived in Kingston for nine years and was involved in several community and civic activities. He served two terms as president of the Parent Teachers Association, was chairman of the Roane County Regional Planning Commission, and served as secretary-treasurer of the

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UNITED WAY LEADERS — Ron Ragland will spearhead the Nuclear Division's "bicentennial" United Way campaign. Seated with him is Carmen Trammel, ORNL, who serves as assistant general chairman. Plant chairmen are, from left, Mike Wilkinson, ORNL; John Nicol, ORGDP; and Bill Thompson, Y-12.

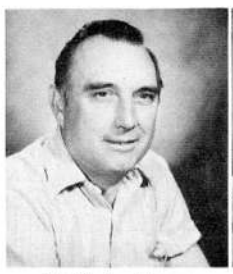
Surplus property sale at Paducah

A surplus government property sale is in progress at the Paducah Plant. Featured in the sealed bid sale are electric calculators, typewriters, pickup trucks, van delivery trucks, a truck tractor, warehouse tractors, forklifts, truck trailers, miscellaneous machine shop equipment and other miscellaneous equipment and supplies.

The calculators and typewriters are located on the C-720 north dock; vehicles are in the area north of C-720; and the other equipment is located in Building C-746-N. Additional information and bid documents may be obtained by telephone PAX 686, BELL 282.

Inspection may be made Monday through Friday until 1 p.m., July 2, when bids will be opened.

Jackson, Ray, Richards promoted at Paducah



E. V. Jackson

R. L. Ray

E. L. Richards

Three promotions are announced at the Paducah Gaseous Diffusion Plant. Emmitt V. Jackson Jr. has been named a senior inspector in Plant Engineering, and Russell L. Ray and Edwin L. Richards are new supervisors in Fabrication and Maintenance.

Jackson, a native of Model, Tenn., has been at Paducah more than 23 years. Prior to joining Union Carbide, he served in the U.S. Army two years.

He and his wife, Yvonne, live at Route 6, Paducah. They have two children, Danny and Deidre.

Ray, a native of Kuttawa, worked at Magnavox in Paducah, before joining Union Carbide in 1961. He served in the U.S. Marine Corps from 1943 until 1946.

He and his wife, the former Louise McManus, live at Route 2, Benton. They have two sons, Robert and Norman.

Richards, who was born in Paducah, worked at the Hughes Market before joining the Paducah Plant in 1973.

He and his wife, the former Sue Rust, have five children, Edwin Jr., David, Diane, Shawn and Melissa. They live at 750 North 23rd Street, Paducah.

Revelle to be fourth Bicentennial Lecturer

Roger Revelle, Richard Saltonstall Professor of Population Policy and director of the Harvard Center for Population Studies, will deliver the fourth in a series of six Oak Ridge Bicentennial Lectures Monday evening, June 28. His topic will be "Technology and the Poor."

The lecture, sponsored by Oak Ridge National Laboratory, will be held at 8 p.m. in the American Museum of Atomic Energy. The public is invited.

Named supervisors at ORNL

B. E. Freeman

E. J. Shepherd

E. Westmoreland

Bobby E. Freeman, Ernest J. Shepherd and Estel Westmoreland have been named maintenance supervisors in the Plant and Equipment Division, Oak Ridge National Laboratory.

Freeman, who was made a supervisory trainee in January, is a 20-year Nuclear Division employee. He was an electrician before his recent promotions. He and his wife, Barbara, have two sons and two daughters; they live on Crestview Drive, Briceville.

Shepherd joined ONRL in 1959 as a carpenter; before that time he was employed by the City Lumber Company in Knoxville. He is a native of Campbell County. Shepherd and his wife, Armistine, have a son and a daughter and live at 612 Black Oak Drive, Knoxville.

Westmoreland, a native of Roane County, has been with the Nuclear Division 23 years. He came to ORNL as a refrigeration mechanic after receiving training at the St. Louis School of Refrigeration and Air Conditioning. His wife, Georgia, is a nurse in ORNL's Health Division; they have a daughter and a son. The Westmorelands live on Oak Ridge Highway, Karns.

Atchley to head fire engineering section

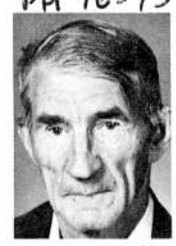
Robert L. Atchley has been promoted to captain at Oak Ridge National Laboratory with primary responsibility as head of the fire protection engineering section in the Laboratory Protection Division.

A native of Knoxville, Atchley joined the Laboratory staff in 1962 and was a fire-guard lieutenant in fire protection before his promotion. He will soon receive an associate degree in fire science technology from Roane State Community College.

He has participated in numerous fire prevention and protection seminars, including the "Fire Loss Management of ERDA Facilities" seminar given by ERDA's Division of Operational Safety, and the Factory Mutual Engineering Corporation's "Loss Prevention Engineering" course. He also served three years in damage control and fire fighting in the U.S. Navy.

retirements

Hayes



Pennycuff

Quarles

Quarles

Rutherford

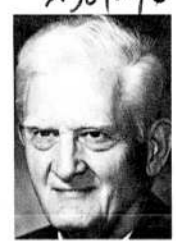
Swatzell

Way

Seven Oak Ridge Gaseous Diffusion Plant employees will retire at the end of June and July.

Thomas E. Haynes, a supervisor in Operations, leaves in July, ending more than 32 years company service. He lives at 104 Uvalde Lane, Oak Ridge.

James C. Pennycuff, Fabrication and Maintenance, also leaves in July, after 32 years service. He lives in Canton Hall, Oak Ridge.



Bettis

Cain

Gude

Pate

Among Oak Ridge National Laboratory employees who will be retiring at the end of June are Charles E. Bettis, Robert E. Cain, James M. Dixon, Genevieve L. Downs, Mary S. Gude and William A. Pate Jr.

James R. and Jeanne Shannon Quarles both retire at the end of this month. Quarles is a department head in Buildings and Grounds and joined Union Carbide in 1944. Mrs. Quarles, a secretary in the Purchasing Division, was hired in 1959. They live at Route 7, Harriman.

Harold S. Rutherford, an electrical mechanic in Fabrication and Maintenance, leaves next month, ending 25 years service. He lives at Route 3, Clinton.

Robert R. Swatzell, an operator in the U-235 Separation Department, lives at 101 West Warren Street. He will retire June 30, after 32 years plus company service.

Dorothy S. Way, a reproduction clerk in Finance, Materials and Services, will end almost 28 years service when she retires next month. She lives at Route 1, Lenoir City.

Dixon

Downs

Bettis, a department head in General Engineering at ORNL, joined Union Carbide in 1957. He lives at 7709 Bennington Drive, Knoxville.

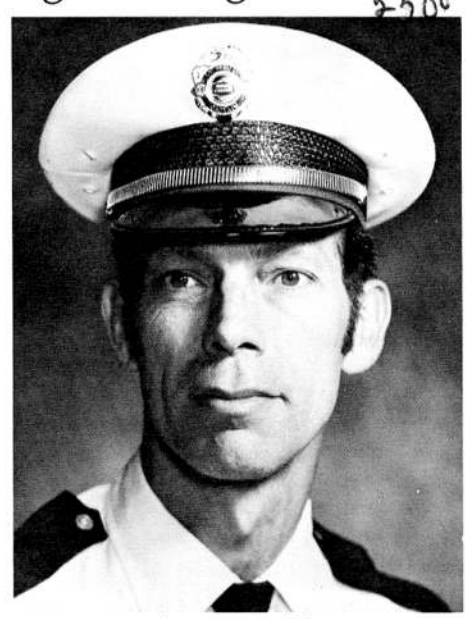
Cain also came to Union Carbide in 1957. An assistant animal facility worker in Biology Division, he lives at 433 Jarnagin Road, Clinton.

Dixon, a guard in Laboratory Protection Division, is taking early retirement after more than 32 years of company service. His home is at 505 Alandale Drive in Knoxville.

Genevieve Downs, a 30-year employee, is taking early retirement from her position as radiation badge clerk in Health Physics Division. She lives in Oak Ridge.

Mary Gude, who joined Union Carbide in 1959, is taking early retirement. She is a laboratory technician in Biology Division and lives at 128 Pembroke Road, Oak Ridge.

Pate is taking early retirement after 31 years of company service. An engineer in General Engineering at ORNL, he lives at 4428 Royal View Road, Knoxville.



Robert L. Atchley

Atchley and his wife, Shirley, have a son and a daughter. They live at 6828 Cain Road, Knoxville.

July 5 Holiday

Monday, July 5 is an official holiday for all Nuclear Division employees, in lieu of Sunday's big birthday for the USA!

No employee will be required to be at work unless his/her presence is required by continuous operations or plant protection.

Findings point to 'superheavy' elements

Evidence for new elements, called "superheavy" elements because they are far heavier than any yet known to man, has been reported by scientists from Oak Ridge National Laboratory, the University of California at Davis, and Florida State University.

The findings were reported last week at an American Physical Society meeting in Quebec, Canada. Researchers believe this work clearly has major implications for experimental and theoretical nuclear physics and also for understanding the origin of elements and cosmology.

The evidence has been obtained in experiments performed at the Florida State University Tandem Van de Graaff Accelerator Laboratory. The research involved sending energetic beams of hydrogen nuclei (protons) through ancient crystals from thorium-bearing rocks.

Results to be published

Radiation from these tiny crystals, called monazites, had damaged the surrounding mica with radiation more energetic than any natural radiation known to man. A radiation damage "halo" was formed which led scientists to suspect a new element might be present.

During the proton bombardment, x-rays were observed that matched those predicted for the element with atomic number 126 (uranium has atomic number 92) with evidence also being present for other superheavy elements. The results are to be published in the bicentennial issue of the journal, *Physical Review Letters*, July 5, 1976.

The most dramatic aspect of the discovery was that such superheavy elements were found in rocks of great antiquity, which indicated that these elements possess considerable stability. Many nuclear theories have predicted much shorter lives for these elements, such that they would not exist today on earth.

Seven-year effort

The discovery capped a seven-year effort by Robert V. Gentry, Oak Ridge National Laboratory, working with support from the Energy Research and Development Administration and the National Science Foundation, who has attempted to explain the origin of the large radiation damage rings called "giant halos." Extensive analytical efforts had failed to provide an explanation prior to the present work at Florida State University and the University of California at Davis.

The experiments that yielded the x-ray evidence were largely designed at the University of California, Davis, by Thomas A. Cahill and Robert G. Flocchini, of the Department of Physics and the Crocker Nuclear Laboratory. They recognized that the chemical nature of the crystal allowed a sensitive survey of a wide range of potential superheavy elements by x-rays, using techniques developed under the auspices of the National Science Foundation and the California Air Resources Board for studies of air pollution. They also recognized that a tandem Van de Graaff would provide low energy proton beams better suited for the tiny crystals than the Davis cyclotron.

Intense beams

The successful conclusion of this study was accomplished by Neil R. Fletcher, Henry C. Kaufmann, Larry R. Medsker, and J. William Nelson, working with Cahill at the Florida State University Tandem Accelerator Laboratory, also supported by the National Science Foundation.

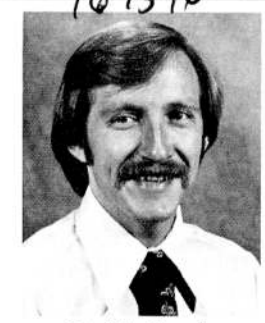
Equipment used in ongoing air pollution studies through the Departments of Physics and Oceanography was combined with facilities of the laboratory to produce, after several months of effort, intense proton beams able to probe the very center of each crystal with a sensitivity to detect one millionth of one millionth of a gram. X-ray structure was observed in the crystal possessing giant halos that was absent in normal uranium-thorium halos, and the energies of these x-ray lines provided an excellent match to previous predictions made by scientists at Oak Ridge National Laboratory.

Improved system

This matching of elemental x-ray signatures, combined with a lack of viable alternative explanations, is the evidence presented for the presence of superheavy elements. A much-improved system is presently being constructed to allow higher sensitivities. Other types of experiments are also being examined as a means of verification of the present evidence.

It is anticipated that such experiments on these samples will allow detailed comparison of present nuclear, atomic, and chemical theories with observations from new elements.

B. V. Brackney



C. M. Cook

G. I. Davis

Three promotions at Y-12

Three recent promotions have been announced in the Y-12 Plant.

Barry V. Brackney has been named a production scheduling analyst in Product Engineering and Scheduling. A native of Lexington, Ky., Brackney joined Union Carbide in 1959. He has attended East Tennessee State University, Carson-Newman and the University of Tennessee.

Before joining forces at Y-12 he worked with the Oak Ridge Processing Company.

Married to the former Evelyn Jones, he lives at 106 Colgate Road, Oak Ridge. The Brackneys have two children, Deborah and Kelly.

Charles M. Cook has been promoted to a senior engineering assistant in the Assembly Division. Born in Summerville, Ga., he studied industrial electronics at North Georgia Technical and Vocational School and served two years in electrical apprenticeship at Y-12. He joined Union Carbide in 1969.

Mrs. Cook is the former Carolyn Ann Pleager and they have two sons, Jeffery and Jonathan. They live at 114 West Arrowood Road, Oak Ridge.

Glen I. Davis has been appointed a fire and guard lieutenant in the Shift Superintendent's Division. He worked with the Tennessee Valley Authority and Knoxville Transit Lines before coming to Y-12 29 years ago.

Mrs. Davis is the former Julia Blair and they have three sons, James, Johnny and Thomas, and a daughter, Jacquelyn Kirk. They live at Route 1, Heiskell.

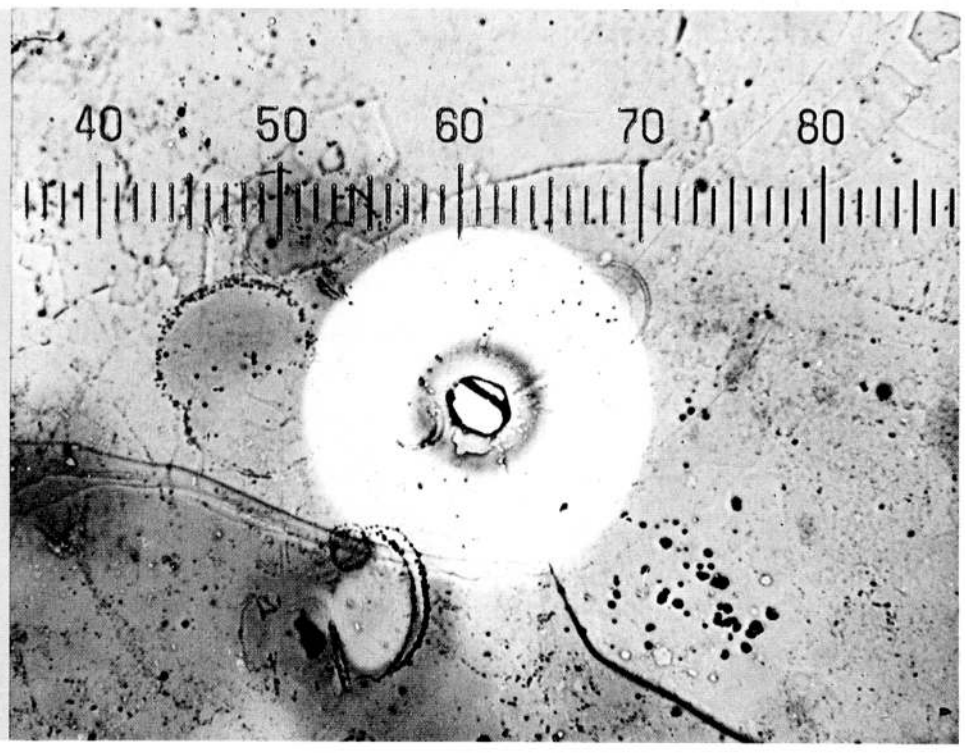
safety scoreboard

Time worked without a lost-time accident through June 17:

Paducah	80 Days	860,000 Man-Hours
ORGDP	92 Days	2,721,431 Man-Hours
Y-12 Plant	103 Days	2,862,000 Man-Hours
ORNL	219 Days	4,417,252 Man-Hours

next issue . . .

The next issue will be dated July 8. The deadline is June 29.



SIGNATURE OF A 'SUPERHEAVY'? — Evidence reported last week for possible "superheavy" elements was first suggested by the large radiation-damage rings, called "giant halos," in this photomicrograph by Oak Ridge National Laboratory researcher Robert V. Gentry. While radioactive halos produced by alpha radiation from heavy elements such as uranium and thorium are commonly observed, the extremely rare giant halos such as this one have been something of an enigma because there are no known radioactive elements possessing radiation with such high penetration distances. The diameter of the halo is less than 1/100th of an inch, each unit on the scale above it representing 1/2,500th of an inch.

division deaths

Alton C. Henson, Paducah Gaseous Diffusion Plant, died recently after a lengthy illness. He was in Fabrication and Maintenance.

Mr. Henson

A native of Marshall County, Mr. Henson was employed in 1952 as a guard. He was elected president of Local 111, International Union Plant Guard Workers of America, and later transferred to the Electronic Fabrication Shop and then to the Instrument Maintenance Shop.

Mr. Henson is survived by his wife, Margaret, daughters, Carol and Inez, and son, Lewis.

He was a member of Milburn Chapel and was active in its youth program.

anniversaries

Y-12 PLANT

35 YEARS

N76-33

Forseman

Robert W. Forseman, Y-12's Dispatching Department, observed his 35th anniversary with Union Carbide last week. A native of Duluth, Minn., he joined the Company there in the Electro-Metallurgy Plant. After serving in the U.S. Army from 1942 to 1946, he transferred to Oak Ridge.

Forseman and his wife, Alice, live at 43 Outer Drive, Oak Ridge. They have a son, Kirk, and a daughter, Lana.

30 YEARS

Normand G. Jarvis, Quality Assurance; James F. Morehead Jr., Medical Department; Ralph E. Redmon, Buildings, Grounds and Shop Maintenance; and James W. Charles Jr., Laboratory Operations.

25 YEARS

Edward Luttrell, Lorene S. Conley, Clinton A. Queen, Lester C. Love, Oscar H. Cutshaw, Samuel K. Ray, William A. Farmer, James M. Schreyer, Edwin R. Robinson, Jake B. Dodd, Wallace F. Carden, Max M. Carty, James H. Wiley, William D. Brock, Owen P. Killeen, Leonard R. Brooks, Howard M. Davis, Winnith R. Malcolm and Howell G. Simerly.

20 YEARS

William H. Hodgson.

ORNL

35 YEARS

R. D. Ackley

Robert D. Ackley, Chemical Technology Division, joined Union Carbide at the South Charleston, W. Va., plant in 1941. He came to Oak Ridge in 1944, working first at the Oak Ridge Gaseous Diffusion Plant; he transferred to ORNL in 1958. He and his wife, Ileane, who works in ORGDP's Laboratory Division, live at 412 Villanova Road, Oak Ridge.

30 YEARS

Charles E. Haynes, Health Physics Division; Charles H. Tucker Jr., Instrumentation and Controls Division; Linton C. Johnson, Health Physics Division; Thomas B. Wilson, Operations Division, and William A. Lowry, General Engineering.

25 YEARS

Charles E. Ryan, Joel R. Buchanan, Dwight H. Newman; April J. Bandy, Luther L. Allen; James H. Burkhardt; John W. Wachter and Gerald M. Slaughter.

20 YEARS

Ruth J. Curl, Betty B. Eichelberger, Charles C. Barringer, Mary M. Loop, Charles E. Klabunde, William H. Williams, James S. Eldridge and Joseph P. Hammond.

GENERAL STAFF

30 YEARS

Gerald B. Knight Jr., ORGDP Systems and Administration.

25 YEARS

Austin M. Read and Dorthea M. Gunness.

ORDGP

30 YEARS

Paul F. Shorten, Chemical Analysis Department; William H. Luckett, Cascade Maintenance Department; and Thomas E. Zava, Employee Relations Coordinator.

25 YEARS

James T. Nail Jr., Marion H. Randolph Jr., Gurney C. Baker and Nicholas J. Tronolone Jr.

PADUCAH

25 YEARS

Forest R. Edwards, Thomas E. Pierce, Charles H. Sears, John L. Hackney Jr., Arthur M. Sherman, Carl W. Walter, Samuel C. Allen, James W. Grisham and Charles O. Grant.

20 YEARS

Graydon Jarvis.

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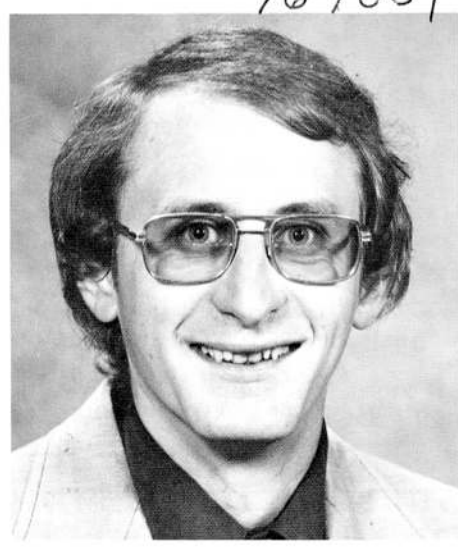


Marshall earns CPA status

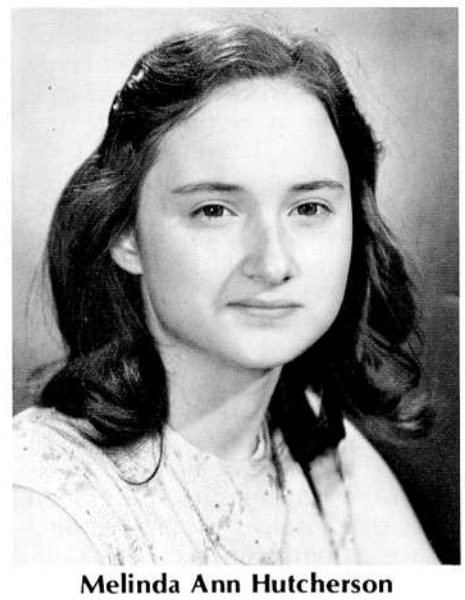
David W. Marshall, Auditing Division, has been notified that he has passed the examination to become a Certified Public Accountant.

He is a native of Highland Park, Mich., and has been with Union Carbide since 1968. He has a B.S. in accounting from the University of Tennessee, where he has also done graduate work.

Prior to joining the Nuclear Division, he was with with a CPA firm in Knoxville, and was a pay disbursing specialist in the U.S. Army from 1969 until 1971.

Marshall is a member of Beta Alpha Psi, honorary accounting fraternity; and Alpha Kappa Psi, honorary business fraternity. He lives at 600 Inskip Road, Knoxville.

Heath High junior named as congressional scholar



Melinda Ann Hutcherson

Melinda Ann Hutcherson, a Heath High School junior, was selected to attend the Washington Congressional Workshop as a Union Carbide scholar from the Paducah area.

The daughter of Mr. and Mrs. Richard H. Hutcherson, she was elected following an essay contest and an extensive interviewing program conducted by the school faculty.

In Washington, Miss Hutcherson visited with congressional and senatorial leaders, cabinet members, military and educational leaders and others in our national government. During past seminars students have attended White House functions, embassy briefings and many national shrines.

Top staff aides to Congress also lead a series of classes on topics such as the committee system, communications, the seniority system and congressional reform.

Miss Hutcherson, an honor student, is active in the Beta Club, Christian Youth Fellowship, Quill and Scroll, is pianist for the school chorus and section editor for her school newspaper. She is interested in music, writing and the Junior Matinee Music Club.

Congressman Carroll Hubbard furnished Miss Hutcherson with background material on congressional activity and planned an informal meeting with her while she visited in Washington.

As a Union Carbide scholar, the full cost of her participation in the Congressional Workshop was defrayed by Union Carbide.

Speechcraft plans made by Knox club

Several Nuclear Division employees are involved in a speechcraft program being sponsored by the West Knoxville Toastmasters Club. Speechcraft is an eight-week series of meetings where oral communication is taught by experienced toastmasters to a limited enrollment in a relaxed environment.

The sessions, beginning July 15, are to be conducted during regular meetings and will be held at the Travelodge Motor Inn, Papermill Road exit near the Interstate in Knoxville.

Meetings are set for Thursday from 6:30 to 8:30 p.m. For details contact Joe Hafford, extension 3-3542, or Knoxville 584-6675.

wanted

Y-12 PLANT

RIDE from 82 East Tennessee Avenue, Oak Ridge, to Central Portal, straight day. Ruth Andrew, plant phone 3-7231, home phone Oak Ridge 483-0620.

RIDE from West Town/Dean Hill area, Knoxville, to any portal, day shift. W. A. Bird, plant phone 3-7930; home phone 584-3034.

ORNL

DRIVER for 5-person carpool from vicinity of Landmark, Stonebrook, Canby Hills and Gulf Park subdivisions via Middlebrook Pike to East Portal, 8 or 8:15 shift. Effective July 1. J. W. Sims, plant phone 3-1486, home phone 693-8829.

JOIN CAR POOL from West Knoxville area, to building 1000, straight day. Veronica Morrison, plant phone 3-1301, home phone Knoxville 588-3729.

RIDE for summer employee from South Clinton (Rt. 6), to either portal, day shift. Richard Fritts, 3-6766.

A successful Bond campaign

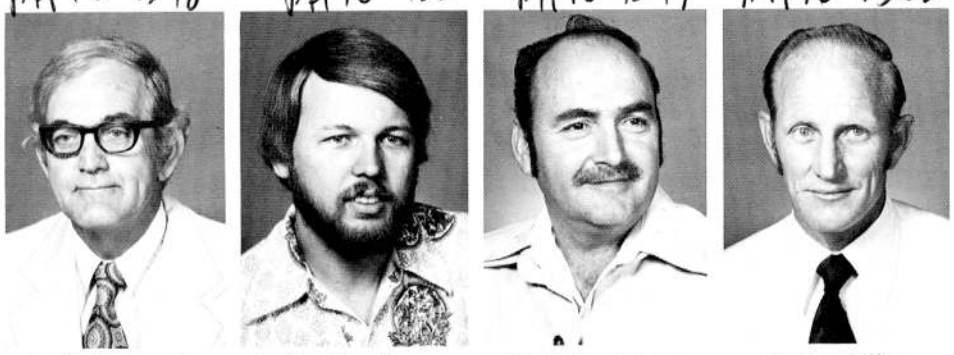
The Y-12 and Paducah plants exceeded their goals in the U.S. Savings Bond campaign with Oak Ridge Gaseous Diffusion Plant and Oak Ridge National Laboratory closely approaching theirs.

Altogether 2,724 new participants were added to those already enrolled, making a total of 12, 263 employees, or 72 percent in the Nuclear Division buying bonds through the payroll savings program.

The final results were:

	New Participants	Total	% Participation
Y-12	653	3,882	83.7
Paducah	473	1,748	81.7
ORGDP	1,067	4,287	79.6
ORNL	531	2,346	47.5
Totals	2,724	12,263	71.7%

PH76-1348 PH76-1361 PH76-1347 PH76-1362



L. H. Bailey Jr. E. B. Caruthers H. E. Crabtree T. D. Giffin

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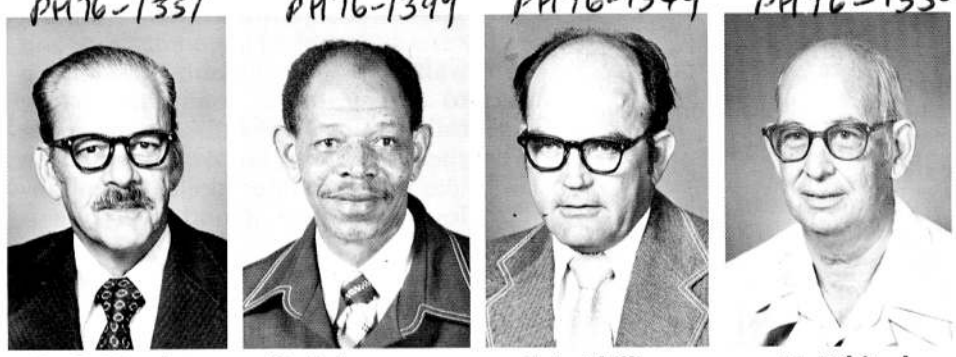


R. C. Hamby R. P. Lowery C. L. Phillips M. Whited

Fabrication and Maintenance at ORGDP names supervisors

Nine new supervisors have been named in the Fabrication and Maintenance Division at the Oak Ridge Gaseous Diffusion Plant.

Luther H. (Pete) Bailey was born in Strawberry Plains, and has been at ORGDP more than 30 years, working in K-1401, K-25, K-1131 feed plant and in K-32 maintenance.

He and his wife, the former Helen Williams, live at 3739 Frostwood Road, Knoxville. They have a daughter, Sue Vineyard.

Edward B. Caruthers, a native of Crossville, attended a technical school there and served four years in the U.S. Air Force before joining Union Carbide two years ago.

He and his wife, Kathy, live at Route 11, Crossville.

Hoyle E. Crabtree, born in Oneida, worked in Y-12 from 1971 until last year when he transferred to ORGDP. He is a veteran of the U.S. Army.

He is married to the former Grace Finley, and they live at Route 2, Lake City. They have two daughters, Pam and Linda, and a son, Richard.

Thomas D. Giffin, a native of Marlow, served eight years in the U.S. Army and worked for Lockheed-Georgia in Marietta prior to joining Union Carbide six years ago.

Mrs. Giffin is the former Peggy Ann White, and the couple lives at Route 6, Harriman.

Readus C. Hamby was born in Clifty and attended the University of Chattanooga. He has been with Union Carbide more than 24 years, and worked with the Industrial Woodworking Machine Company.

He lives in the Eastridge Apartments, Kingston. He has two daughters, Lenora Hightower and Delores Holt and a son, David.

Renchel P. Lowery, a native of Saltillo, is a graduate of the TAT program in the Y-12 Plant. He is now attending Cooper Business College.

He and his wife, Bessie, live at Route 5, Babeley Road, Knoxville. They have three daughters, Seketta, Joy and Rachel.

Charles L. Phillips was born near Deer Lodge, and worked with Fisher Body Plant 15 years before joining Union Carbide in 1974.

His wife is the former Junnie Jones. They live at Route 1, Lancing. They have five sons, Robert, Randy, Raymond, Ronnie and Roger.

Melvin Whited was born in Coeburn, Va., and worked with Bendix Corporation nine years before joining Union Carbide. He worked in Y-12 14 years and has been at the ORGDP since 1974.

He and his wife, Charlotte, live at Route 21, Bob Gray Road, Knoxville.

Gerin joins Chimpanzee Users' Panel at NHLI

John L. Gerin, director of the Oak Ridge National Laboratory's Molecular Anatomy Program "satellite laboratory" at Rockville, Md., has been appointed to the Chimpanzee Users' Panel of the National Heart and Lung Institute (NHLI), National Institute of Health.

The Users' Panel reviews requests for the use of a colony of hepatitis-free chimpanzees which is under the control of the NHLI.

Gerin has been with the MAN Program since 1968, and has been particularly involved in hepatitis research.

PH76-1352

H. H. Young

Herbert H. Young was born in Ashtabula, Ohio, and attended the Anderson Aircraft School in Nashville. He has been at ORGDP since October, 1973. He worked with Union Carbide in Ashtabula 24 years before transferring to Oak Ridge.

His wife is the former Jean Smith, and they live at 1142 Mayflower Road, Kingston. They have two sons, David and Scott and a daughter, Amy Ravotti.

Aydelotte named as financial officer in Waste Isolation

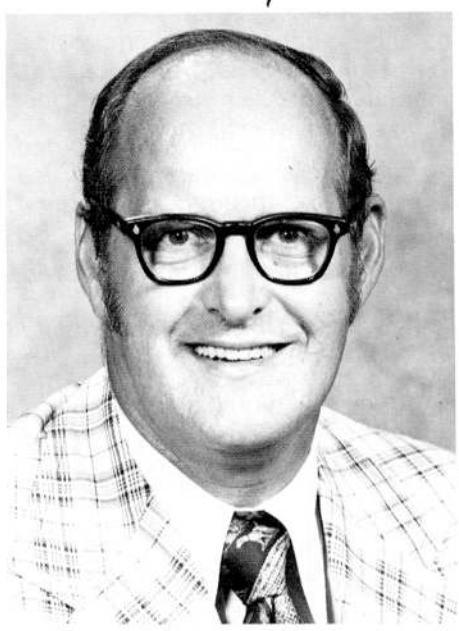
167513

Kenneth K. Aydelotte Jr. has been named financial control officer in the Office of Waste Isolation, Clayton D. Zerby, OWI Manager, has announced.

Aydelotte, a native of Lawrenceburg, holds a B.S. degree in business administration from the University of Tennessee. He has been with Union Carbide 19 years, and prior to that time was a secondary school teacher. In his new capacity, he will be responsible for administering the accounting, budget and financial control functions of OWI, and will report to Lowell L. McCauley.

He was most recently financial plant coordinator for the Oak Ridge and Paducah Gaseous Diffusion Plants in the General Accounting Division.

Mrs. Aydelotte is the former Mildred Brown, and they have a daughter, Carole, attending Roane State Community College. They live at 918 Chilhowee Street, Harriman.



Kenneth K. Aydelotte Jr.

Aydelotte is a commissioner on the Harriman Housing Authority.

question box

If you have questions on company policy, write the Editor, Nuclear Division News *(or telephone your question in, either to the Editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.*

No smoking area

QUESTION: Isn't smoking in chemistry labs where highly flammable and toxic materials are used against safety rules? I have observed this being done where I work on many occasions.

ANSWER: Yes, smoking is prohibited in such areas. Laboratories where flammable materials are used should be posted or specified as "no smoking" areas in operating procedures and/or local safety rules. When smoking is observed in unauthorized areas or in unposted areas where an apparent hazard exists, it should be immediately reported to the supervisor in charge of the area.

Holiday pay - day off?

QUESTION: Personnel who are weekly salaried and are scheduled to work a holiday get 2.5 times pay or a regular day's pay if not scheduled to work. Monthly salaried personnel who are on shift work do not get the benefit of overtime pay but get a day off sometime later. Would it be possible to make this more equitable by giving monthly personnel a choice: Overtime pay as weekly personnel receive or *at least* two days off some other time instead of just the one day off?

ANSWER: There are many distinctions in pay practices between exempt and nonexempt payrolls. The reference to "exempt" means exempt from wage and hour laws because of regular professional and/or managerial duties, and thus exempt from rigorous enforcement of fixed hours and work schedule regulations. This may be considered a disadvantage by some exempt employees, but most realize that the overall advantages outweigh the probability of extra hours, weekend or holiday work, etc. The probability of extra hours, weekend or holiday work, etc., are considerations in determining exempt salary levels.

Many companies do not permit an exempt employee to be off later when he/she works on a holiday. We do not contemplate changing our present liberal policy.

Use of personal cars

QUESTION: What is the policy concerning employees' use of personal vehicles for official trips between Oak Ridge plants, ERDA, Purchasing, etc., during working hours? On many occasions, Company vehicles are not available.

ANSWER: The Company does not expect employees to use their personal vehicles for official business travel from one Oak Ridge installation to another. Each installation has government vehicles to accommodate such planned official travel. If an employee elects to use his/her personal vehicle for personal convenience, this is permitted. We suggest you discuss your official travel needs with your supervisor.

patents granted

To Carlos E. Bamberger, Warren R. Grimes and Donald M. Richardson, all of ORNL, for "Process for Generating Hydrogen."

To Lawrence S. Hawk, Oak Ridge Gaseous Diffusion Plant, for "Leak Test Mixture and Method for Using Same."

"A Different Drummer" — part III

He sings, 'Come, Josephine, in my pretty *fliegenmachine'*

Michael D. Shepherd, who joined the Public Relations staff recently, is a licensed pilot through the Federal Aviation Administration. He also hunts, fishes and plays the guitar, harmonica and piano . . . but flying is his first love. Almost every weekend finds him off in "the wild blue yonder."

And, he says, you haven't seen East Tennessee and its wild, rugged terrain, until you see it from a small aircraft.

by Michael Shepherd

The little yellow Aeronica Champ has climbed to 800 feet above ground at the small country airport. I am in the traffic pattern, ready for a landing. This time, everything has a new meaning to me. I am alone for the first time in the airplane; no instructor shouting instructions at me over the clatter of the engine and the rush of the wind. No radio to warn everyone in the vicinity that I am a student, alone in an ancient machine that was built before I was born. No one to tell how happy and scared I am.

Then, at the right point, I cut the throttle back with my left hand, and gently hold the stick back with my right. I watch the airspeed needle drop slowly as I glide, the propeller merely turning with the wind, it seems. 90 . . . 80 . . . 70 . . . 65 . . . There! I lower the nose slightly to hold that airspeed.

It's now time to turn left and begin to line myself and this machine up with the runway. I feel the descent with the seat of my pants. Only later will I fly aircraft with more than four instruments. Right now I must become a part of this machine. Feel the turns and banks. Feel the climb, descent, and landing. Feel everything except your gas, oil, airspeed and altitude.

"The thrill is completely different from anything I have ever accomplished before."

Now the runway is dead ahead, right off the nose and about three hundred feet below me. I give the idling 65 horsepower engine a spurt of throttle to flatten out my descent a bit, and then let the plane continue to settle.

At the last possible moment, when I am but three feet from the hard asphalt surface of the runway, I gently haul back on the stick and the plane momentarily lifts upward. The three wheels touch the runway in soft unison and I roll down the remainder of the runway, coast to the asphalt apron in front of the hangar, and stop the engine.

The smiling instructor walks over and repeats the traditional ritual of cutting off my shirt tail to be tacked up on the office wall showing that on this date, I soloed in an aircraft for the first time. The exuberant feeling still clutches me as I am patted on the back and shake hands with all the veteran pilots who have become my friends since I began learning to fly. And somewhere in the background, a mechanic has produced a kazoo and is softly humming "Up In the Air, Junior Birdmen."

If you got the least bit intrigued or thrilled about the story of my first solo flight a few years ago, then maybe you should try the experience for yourself. The control, navigation and communication of a flying machine is something that requires time to learn, but the thrill is completely different from anything I have ever accomplished before. And the thrill is still there, years later, when I fly a new type or class of aircraft.

It is wonderful to "Slip the surly bonds of earth . . ." as John Gillespie Magee Jr. wrote in his timeless poem 'High Flight.' To see the earth below transformed into a jigsaw puzzle of silver, green and blue is beautiful. To soar where hawks and eagles cannot reach on their wings of bone and muscle is a feeling of power. To lift above the clouds and see a sunrise when all below you is drab and gray; that cannot be matched by any sort of feeling here on the earth.

"You take him or her for a ride and try not to kill the both of you."

Turning from these lofty words, let's look at reality. I suppose the most frequent question I am asked is about how hard it must be to learn to fly. My standard answer is that if you are fairly well coordinated, drive an automobile around Knoxville or Oak Ridge without getting maimed or killed, and have a gift for walking and chewing gum at the same time, you won't have to spend too much time and effort in learning to fly. However, if you are a normal, average human being such as I am, then you might have to work at it a bit.

Basically, flying involves a sense of balance, doing two or three functions with your body at once, and getting your nerves in the right situation to react with just the right response. It takes 35 to 50 hours of flying time for one to get a private pilot's license. Approximately half of those hours must be dual instruction, with the instructor in the plane with you. The other half is done by yourself and is primarily practice on navigation, procedure and takeoff/landing practice.

You must also pass a written examination that takes from two to four hours and covers everything from meteorology to Federal Aviation Regulations. Most of the things covered on the written exam are to be learned from a ground-school, offered in most places along with the flight instruction, and from the bible of airmen, the Airman's Information Manual.

If you get through all the instruction without killing the instructor (who is shell shocked because he forgets his rabbit's foot a lot) and attaining a passing mark of 70 or above on the written exam, you are then ready for the final Catch-22. That

"The stories are of battle, barnstorming and narrow escapes."

is to say, you are ready to go see the person in charge of pilot certification in your area, for the "checkride."

This is the most or the least exciting part of all, depending on your state of preparation. You are tested orally on the regulations, show the examiner how you plan a cross country flight, and then you take him or her for a ride and try not to kill the both of you.

If you do well, you will get your temporary airman certificate as soon as you do your final landing. (Pardon the sexist remark — the FAA still hasn't decided to change the paperwork to "Airperson Certificate."

Now you are able to take the kids and Uncle Ferd for a little flight over the old homestead. (As a previous student pilot, you were only allowed to carry your instructor and your maps. No passengers until you got your license. But all that has changed with your new certificate.)

All the family is awed with your skills as you gently lift them from the runway in your *Fliegenmachine* and waft them over hill and dale, talking to the air traffic controller on the radio, adjusting the throttle, scanning the instruments and otherwise acting like the six million dollar man. They love, you love it and everyone is happy.

You are careful not to make any sudden moves or put the airplane in any unusual attitudes, because you remember that the airplane is only rented, and they charge extra for cleaning up Uncle Ferd's lunch out of the back seat after he's lost it in a sudden turn. You make a good landing (only a couple of bounces) and everyone compliments you on your skill and asks when you will be flying 747's for the airlines.

You are now a member of an exclusive club in which everyone has one thing in common: flying. The club is open to those who have the common bond; they will all sit around the greasy hangar on rainy days, cursing the weather and talking about their experiences in the Waco OX-5's, the Cubs, and the Taylorcrafts, the helicopters and jets.

The stories are of battle, barnstorming and narrow escapes. Imagination and experience make up the prerequisites to join this unique group. And oh yes, a pilot's license. If you get started now, the membership of the "Fliers and Liars" club is open to you. But only if you take the first step. It really isn't that hard; go to your local airport and talk to the resident instructor about taking a ride. Then decide for yourself.

More Recreationotes on page 7 4855-1

PADUCAH FISH WINNERS — From left are E. R. Murphey, John Elkins, Roger Emery and Ralph Hutchins, claiming their awards as winners in the Crappie Contest, a species competition within the annual fishing program. Other winners, not shown, were Steve Bauer and Bill Vaughn.

Paducah fishing rodeo

E. R. Murphey, John Elkins, Roger Emery, Steve Bauer and Bill Vaughn were the big winners in the crappie contest, held recently at the Paducah plant.

Murphey's catch, weighing two pounds, 11 ounces; Emery's tipped in at two pounds, eight ounces. Bauer's crappie weighed the same, but was slightly shorter; and Elkins' catch weighed the same, but was slightly shorter, too. Hutchin's crappie also weighed the same!

Length and girth of entries are used to break ties. There was 32 entries, weighing a total of 56 pounds. (The Recreation Department is considering entries next year in the flesh — filleted, of course!)

The bass and bream contests are in swing and entries are being steadily received. All fishermen and fisherwomen should remember to pick up an entry blank to make sure it's in the tackle box on that next outing. There's nothing sadder than catching a big one and not having a thing to show for it.

medicine chest

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

Myopia correctable with contact lens technique?

QUESTION: My daughter has progressive myopia (nearsightedness) and has had to have her glasses made stronger several times during the past year. I have been advised that contact lenses will control or even correct the problem. I enclose a pamphlet on orthokeratology that describes this technique. What do you think of it?

ANSWER: The pamphlet defines orthokeratology as "the reduction, modification or elimination of refractive anomalies by the programmed application of contact lenses or other related procedures."

The technique described involves the use of contact lenses to make gradual modifications in the shape of the cornea. It is a little like orthodontic dentistry, where braces are used to straighten teeth. Apparently, by using contact lenses of progressively different curvature, the shape of the cornea can be gradually changed; once it reaches the "ideal" shape it can be maintained by "retainer" contact lenses.

At first thought, most people probably associate only the lens of the eye with focusing light on the retina. Actually, the cornea (the outermost surface of the eye in the area of the pupil) causes the greatest deflection of light rays. The anterior and posterior surfaces of the lens also bend the light rays in the same direction, so that they converge into a sharp focus on the retina.

As a child grows, the eyeball may develop in too oblong a fashion and the light rays are focused in front of the retina, causing a blurred image. Or, if the cornea and lens refract the light too much, even though the length of the eyeball is normal, the light will also focus in front of the retina and the image will be blurred.

The easiest way to correct myopia is to provide either contact or ordinary lenses. Permanently altering the refractive capacity of the eye by molding the shape of the corneal surface is a new approach.

I was unable to find any full-length articles in the medical literature on orthokeratology. I sent a letter to the Questions and Answers section of the *Journal of the American Medical Association* and received a copy of the answers two expert ophthalmologists gave to a similar question in December 1974.

Orthokeratology was not recommended. Any improvement that occurs following flattening of the corneal curvature is seldom permanent and requires a reapplication of contact lenses. Vision can be distorted when the lens returns to its original shape, and there is a risk of a permanent irregular astigmatism.

Wearing contact lenses that are too flat could produce some scarring of the cornea. In addition, such a process would likely be quite expensive because of the numbers of different contact lenses which might be required.

Cleanliness deters lice

QUESTION (A frantic telephone call): Oh, doctor, I hear there are lice in our restrooms at work. I am so frightened! What can we do? We have to go to the bathroom!

ANSWER: I reassured this distraught caller that crab lice do not cause a fatal illness! I indicated that even though no lice had been seen, spraying and cleaning of the affected area was underway and would be extended to all restrooms in the building. To meet the immediate crisis, I suggested she use a paper commode cover.

The crab louse, *Phthirus pubis*, is a beautiful crab-like little creature about 1.5 to 2 mm long and grayish white. It struggles to survive by infesting human pubic hairs, but may invade any other hairy area from the ankles to the eyebrows.

These lice are remarkably stationary in their habits. The adult attaches itself to the skin and sucks tissue juices. The female deposits her eggs at the base of the hair, where they remain for six to eight days. It therefore takes a couple of weeks before the full-fledged infestation is apparent.

The chief symptoms are persistent and severe itching. A bluish discoloration of the skin is sometimes seen after a prolonged episode. Persistent scratching may produce secondary skin infections.

Another source of severe itching is the itch mite, *Sarcoptes scabiei*, also called scabies. Body and head lice can also be a problem. During World War II the body louse got the nickname "mechanized dandruff."

Prevention depends on personal cleanliness. The lice or mites are usually spread by close or venereal body contact, handling clothing, sleeping in contaminated beds and infrequently from contaminated commodes.

Treatment is easy and usually successful unless reinfestation occurs. Clothing and bedding have to be thoroughly cleaned. Cleaning and spraying toilets is useful, unless constant recontamination occurs. Benzene hexachloride used as a cream, lotion or shampoo will destroy the lice on the body.

It is grossly unfair to automatically associate lice with any social, occupational or educational level. Nowadays there are occasional educated, well-paid people who don't bathe frequently and have liaisons with earthy people of like nature who may be infected.

PH76-1363

Joseph C. Hall

Carbide bowling

Del Ducay with a scratch series of 581; and Willie Towns, with 523, led the Carbide Family Mixed League recently, as the Oops, Smooth Strokes and Blue J's all tie for first slot, as the summer season gets underway.

The Scatter Pack posted high team series with a combined score of 2358.

Golf leagues

The Sherrod-Baker duo leads the South Hills Golf League, three ahead of Rogers-Carter.

Chitwood-Troutman stand ahead of Marrow-Kovac and Bennet-Broders in the Dead Horse Lake League. Zang-Amerine edge up close to the leaders.

Golf lessons

Proficiency on the greens, that's what it's called. If you would like professional instructions on the fine art of golf, let Recreation know. If enough interest is shown group lessons will be available to both men and women wishing to sharpen their prowess on putting, driving or whatever. Just call Recreation, extension 3-5833.

Hi power rifle

Jack Huff, Y-12, won the fifth match of the Carbide High Power Rifle League with a 460 out of 500. Bill Galyon, also of Y-12, posted a 457; while Don Kiplinger, ORNL, came in third with a 446.

Skeet league

Y-12er Alan Van Hull zeroed in on May skeeters with a 49.156 score to down other shooters in the Skeet League. Orville Laurendine, also of Y-12, placed second with 48.240. ORNLer Roy Hicks placed third with 47.920.

Hall re-elected as SME director

Joseph C. Hall, Oak Ridge Gaseous Diffusion Plant, has been re-elected a director and vice president of the Society of Manufacturing Engineers. This is his third two-year term on the board.

Hall, a certified manufacturing engineer, is past chairman of the Knoxville Oak Ridge Chapter 107 of SME. On the regional level, he has served in all elective offices and was chairman of Region V in 1969-70. He has served as national secretary and chairman of the administrative council and the membership committee.

He is a mechanical engineering graduate of Oklahoma State University.

The SME, with headquarters in Dearborn, Mich., has an international membership of 43,000 in 35 countries. A member of the World Federation of Engineering Organizations, the Society's purpose is to advance scientific knowledge in the field of manufacturing engineering and to apply its resources to research, writing, publishing and disemminating information through various educational programs including conferences and expositions. The Society also sponsors worldwide certification for manufacturing engineers and technologists.

The Halls live in Kingston.

ORGDP bowling

A new league debuts in the *News* this week as the K-25 D Shifters take to the alleys at Tri-County Lanes. Clarence Nelson whammed away pins on opening night with a 213 game and a 549 series. Alma Springs rolled high for the women, posting a 171 game. The Drifters, Team 7, Team 11 and Union Peoples all rolled over their opponents.

Softball leagues

The ESD and Snakes still are undefeated in the Atomic League; as the Knuckle Balls and Fes-Kids come up with a five won - one lost record in the Nuclear League.

League standings follow:

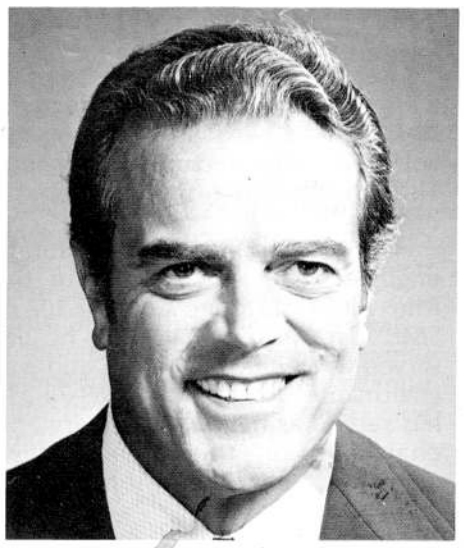
ATOMIC LEAGUE

TEAM	WON	LOST
EDS	5	0
Snakes	5	0
Shifters	6	1
Gashouse Gang	5	1
Bruins	5	2
Artie's Army	4	2
BMS-Bioradicals	3	2
Bio Rejects	3	2
Ecology	3	2
Beta 2 Bunters	2	2
The Steelers	2	5
Mc's Pack	2	5
Ridger Rummers	1	4
Outlaws	1	4
Avengers	1	5
Rednecks	0	5
Hotdogs	0	6

NUCLEAR LEAGUE

Knuckle Balls	5	1
Fes-Kids	3	1
Killer Bees	5	2
Magnetic Fielders	3	2
Barrier Bombers	4	3
The Streakers	3	3
Thermos	2	2
Terodactyls	4	4
Knockers	3	4
Swingers	3	4
Odds & Ends	2	5
Ding-Bats	0	6

Patriarca is Adams Lecturer



Peter Patriarca

Peter Patriarca, Metals and Ceramics Division at Oak Ridge National Laboratory, presented the 1976 Comfort A. Adams Lecture at the annual meeting of the American Welding Society (AWS) last month in St. Louis. His subject was "Elevated-Temperature Behavior of Austenitic Stainless Steel Welds for Liquid Metal Fast Breeder Service."

The lectureship was created by the AWS in 1943 to honor Adams, its founder and first president. It is an award made annually by the AWS Board of Directors to an outstanding scientist or engineer for a lecture presenting some new and distinctive development in the field of welding.

Patriarca is manager of the Liquid Metal Fast Breeder Reactor (LMFBR) Fuels and Materials Program at ORNL. He received B.S. and M.S. degrees in metallurgical engineering from Renssalaer Polytechnic Institute in 1948 and 1950, respectively, and has held group leader and section head posts in the Metals and Ceramics Division since joining the Laboratory staff in 1950.

He is a member of Sigma Xi, the American Society for Nondestructive Testing and the American Nuclear Society. He is a Fellow of the American Society for Metals, and has served on the national Metals Handbook Committee and as chairman of the Oak Ridge Chapter in 1954.

Patriarca and his wife, Virginia, reside in Knoxville and have three children and three grandchildren.

$333-76

EARN CERTIFICATES — Receiving certificates of high school equivalency at the end of the 1975-76 Basic Education Improvement Program term were (seated, from left) J. C. Grove, Operations Division; Lloyd R. Nolan, Plant and Equipment Division; Helen A. Hatmaker, Employee Relations Division; Bobby J. Bruce, Plant and Equipment Division; Bobbie W. Caldwell, Operations Division, and Tommy H. Jenkins, Plant and Equipment Division. Pictured with the group are (standing, from left) Truman H. Freeman, program coordinator; Constance Anthony and Rose Robbins, instructors, and Bert G. Catron, head of ORNL's Personnel Development and Systems Department, which administers the program.

Six complete high school work

As diplomas were being handed out in high schools and colleges across the country this month, Oak Ridge National Laboratory staged some graduation ceremonies of its own.

Six employees, participants in the Laboratory's Basic Education Improvement Program, were awarded certificates of high school equivalency — in ORNL's eyes, the same as a high school diploma. Fourteen more, after satisfactorily completing the 1975-76 BEIP term, were awarded certificates of participation.

(The Laboratory's In-House Development programs also awarded certificates this month. Names of participants will appear in a future issue of *Nuclear Division News.)*

The Basic Education Improvement Program, coordinated by the Personnel Development and Systems Department, Employee Relations Division, is designed to help employees with less than a high school education improve their educational levels so that they can become eligible for promotion opportunities. Study materials and 60 hours of classwork per term are provided to students, who are grouped according to educational level, and a counseling program is available to help interested employees select the type program best suited to their needs.

In addition to the six "graduates" shown above, 1975-76 BEIP participants were Vivian Hardin, Horace M. Pratt, Jessie Inman, Nathan B. Carr and Paul L. Jude, all of Operations Division; and John Davis Jr., John N. Fine, Gus Hatcher Jr., Maurice W. Williams, Herbert C. Booker, Paul D. Browning, Jack L. Wright, Floyd R. Wells and Hal Williams, all of Plant and Equipment Division.

United Way (Continued from page 1)

Kingston Community Children's Theatre.

He and his wife, Barbara, and son, Steve, recently moved to Concord, where he serves as treasurer for the Farragut Middle School PTA.

General Staff

Working with Ragland to make this year's drive a success are general committee members Carmen J. Trammel, assistant chairman; Ruby A. Miller, publicity manager; Roger C. DeBinder, treasurer; Kurt V. Land, campaign materials manager; John M. Shumpert, payroll auditor; Charlie E. Williams, computer management; Jack A. Holt, computer reports coordinator; Ron K. Todd, campaign documentation manager; and Nelson H. Bethea and Harry J. Brown, general staff advisers.

Installation chairmen are also members of the general committee. They are listed below along with members of their respective staffs.

Nicol ORGDP leader

John D. Nicol is United Way campaign chairman at the Oak Ridge Gaseous Diffusion Plant. Nicol, who is superintendent of ORGDP's Shops and General Maintenance Department, joined the Nuclear Division staff at the Paducah plant in 1952.

Nicol served as assistant chairman of ORGDP's United Way campaign last year. He has been active in several savings bond drives, serving as bond drive chairman for ORDGP in 1973, and as chairman for the Nuclear Division's bond drive in 1975.

Nicol holds membership in several civic organizations, and resides with his wife, Joan, in Oak Ridge. They have two sons, Bruce and Mark.

Nicol's United Way team consists of: James K. Denton, co-chairman; Robert S. Resseguie, treasurer; Charles A. McAmis, assistant treasurer; James E. Heiskell, solicitor instructor; John H. O. Purnell, meetings coordinator; B. Wayne McLaughlin, publicity coordinator; George E. Proffitt, materials manager; and Virginia H. Byerly, secretary.

Y-12 chairman

William H. Thompson Jr., Y-12 Plant chairman, has been involved with United Way agencies and in Nuclear Division United Way campaigns for many years. He is currently president of the Board of Directors of Community Services for Exceptional Citizens, an agency in Anderson County.

Thompson is superintendent of the Quality Evaluation Department, Assembly Division, at Y-12. He joined the Nuclear Division in 1961 after serving for three years in the U.S. Navy.

Thompson and his wife, Dottie, have three children. They live in Oak Ridge.

Included on Thompson's staff are: R. Gerald Dunn, assistant chairman; Charles E. Robinson, associate chairman; William T. Calhoun, associate chairman; Norman A. O'Neal, associate chairman; Charles R. Lively, associate chairman; Carl S. McMurray, treasurer; Richard C. Cawood, publicity coordinator; Mary C. Fairfield, solicitor training; and Dixie B. Vanover, materials.

Wilkinson at ORNL

Michael K. Wilkinson, ORNL chairman and director of the Solid State Division is a strong believer in the United Way. "I believe there are two ways you can give — one is with service and the other is with financial support," said Wilkinson. "That's part of the reason I feel so strongly about being involved in the ORNL campaign. Since time is something I have very little of, I can help get the financial support for the agencies."

Wilkinson joined the ORNL staff in 1950. He and his wife, Virginia, have three children: Robert, Elizabeth and William. They reside in Oak Ridge.

The ORNL campaign staff includes: Gordon Fee, assistant chairman; Robert Keil, associate chairman; Emmitt Brown, associate chairman; Frank Kocur, treasurer; Janet Nunley, publicity coordinator; and Phyllis Green, materials manager.

The campaign last year was very successful. The official goal for the three Oak Ridge plants of $485,000 was exceeded by more than seven percent, with a grand total of $519,362 pledged or contributed.

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NUCLEAR DIVISION
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